

Date=11/09/2020

Lecture By=Arkesh Jaiswal

Subject ⇒ System Design=4

IN PREVIOUS LECTURE (QUICK RECAP) Date-10/02/2020	In Today's Lecture (Overview)
How Quora Works FE(Frontend) BE(Backend) DB(Database) How Google Dropbox Works FE(Frontend) BE(Backend) Question For Self Practice	HOW INSTAGRAM WORKS? FE(Frontend) BE(Backend) DB(Database) S3 Mcqs

In todays lecture we learned how instagram works

HOW INSTAGRAM WORKS?

FE(Frontend)

FEED / POSTS => STORIES

SEARCH

REELS

ACTIVITY

ADD POST

MESSAGES

PROFILE => REPORT, SETTINGS

SAVED ITEMS

CAMERA

LIKES

COMMENTS

FOLLOWERS

BE(Backend)

ACTIVITY [liked post, commented, follow request, friend went live, accepted follow req]
CREATE FEED (user_id, (home/reels)) => [ML (like, view, comment), following] ...add an

SEARCH (query) => [tags, posts, users, location]

ADD POST => create entry in db

MESSAGE => create entry in db

LIKE =>

COMMENT =>

FOLLOW =>

PROFILE => usage (read from db), settings (read/update)

DB(Database)

USER [user, bio,]

POSTS [media_link, media_type(img, video, gallery, reels, igtv), time, user_id, caption, location]

COMMENTS [comment, post_id, user_id, time]

LIKES [entity_id, entity_type, user_id, time]

SAVED ITEMS [post_id, user id, time]

FOLLOWERS [follower_id, user id]

MESSAGES [message, message type(text, image, gif, post), sender, receiver, time]

ACTIVITY [activity, time, user id]

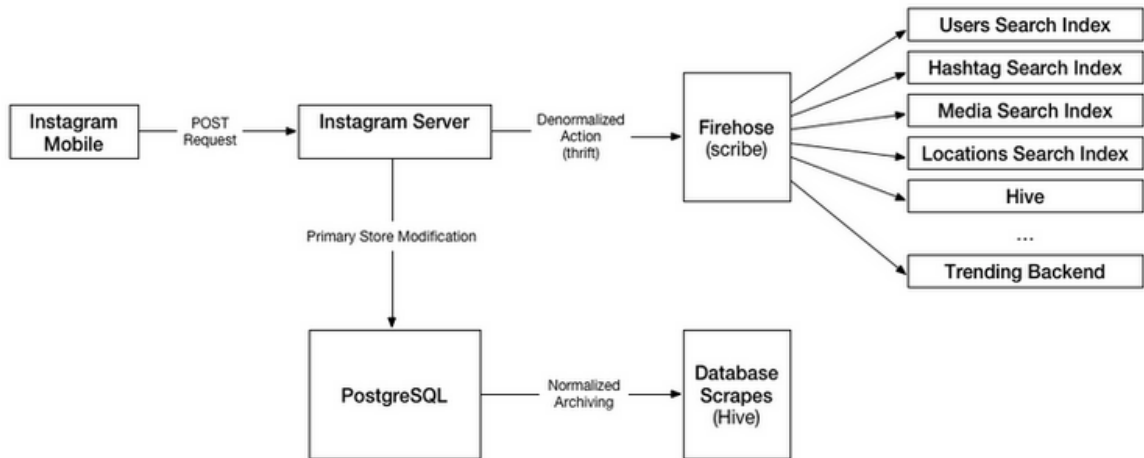
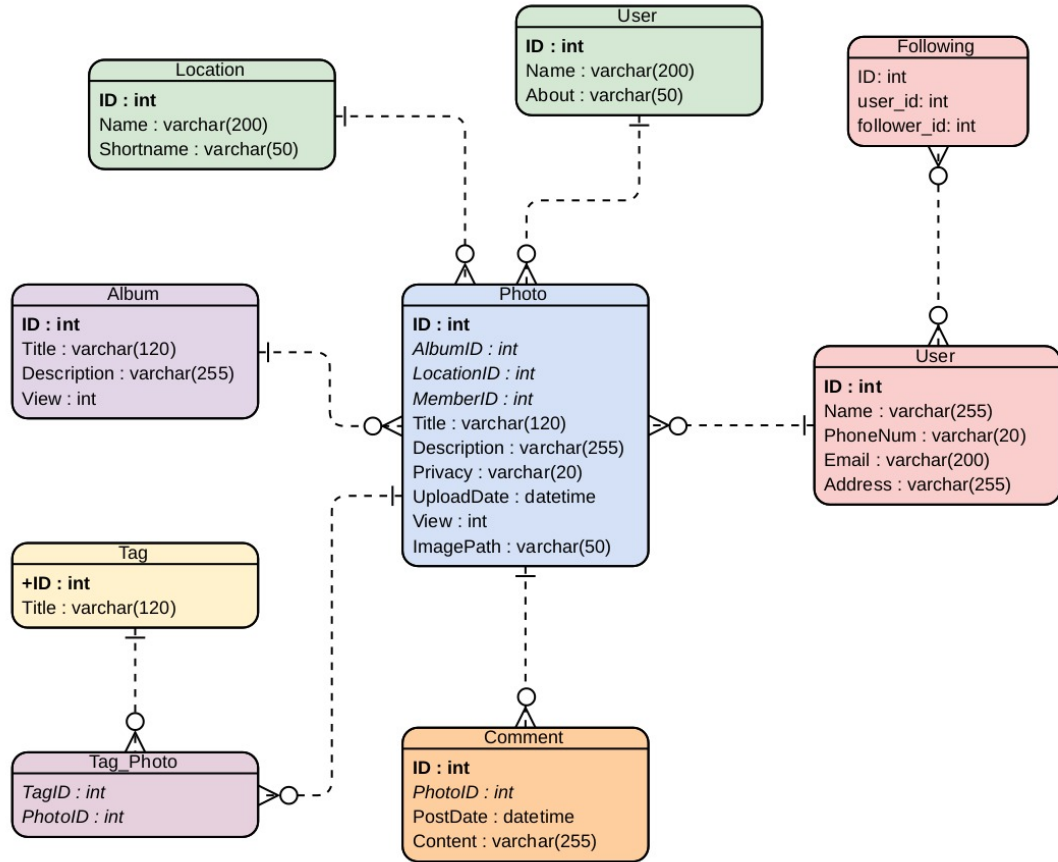
STORIES [media link, highlight name, time, user_id] STORY VIEWS [stories, viewer user id]

USAGE [duration , day, user_id]

SETTINGS [setting, user_id]

S3

SECURITY PASS <=> MEDIA



Mcqs

1.What would you use to store data from a self-driving car app?

A = SQL db

B = NoSQL db

2.What are the advantages of a CDN?

A = geographic closeness of the server

B = caching

C = cheaper than BE hosting services

3.Where would you store media for an Instagram service?

A = Cloud storage / CDN

B = BE server

C = DB server

4.Which is not a cloud server provider?

A = Amazon

B = Google

C = Jio

D = Microsoft